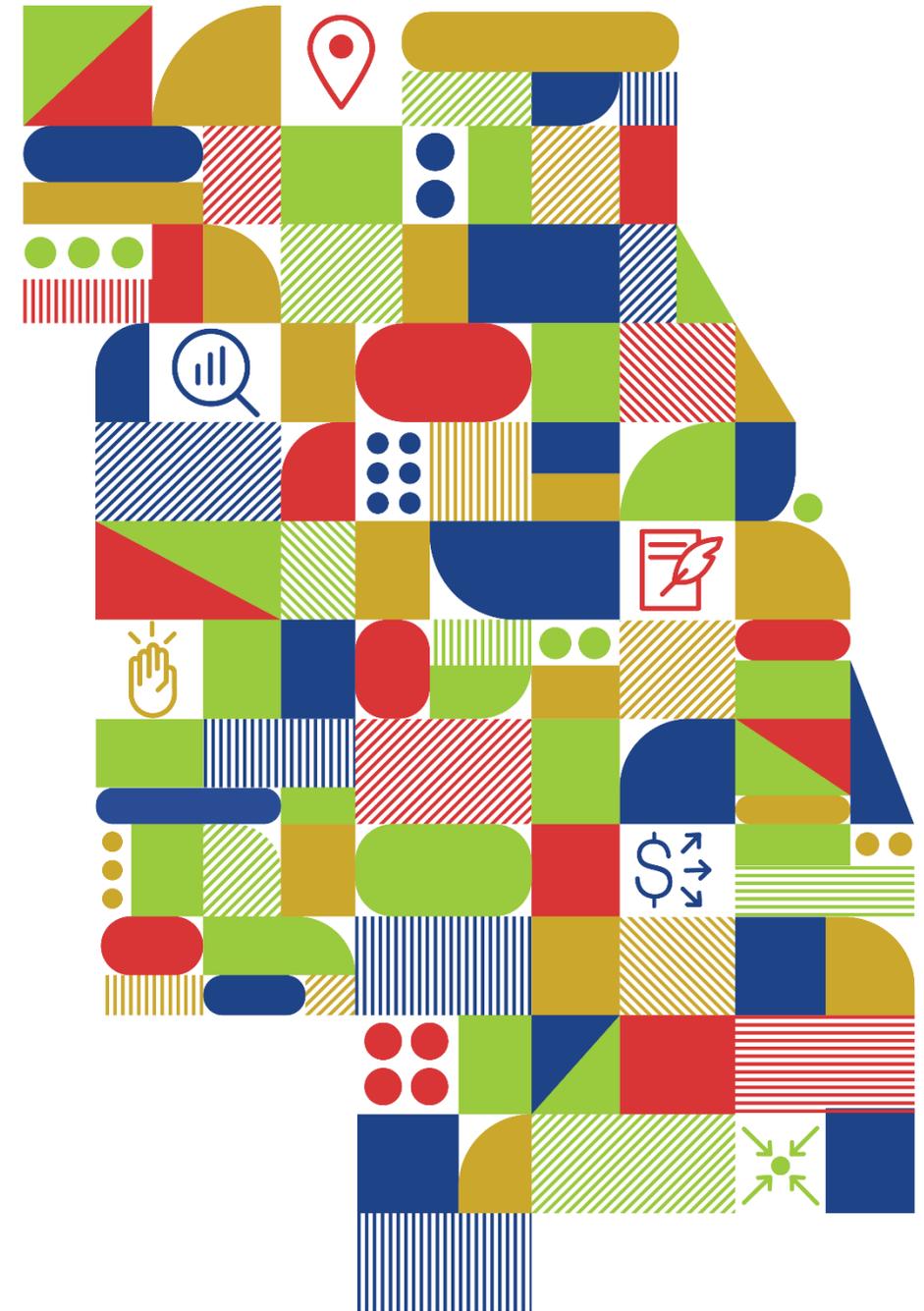




Transportation GHG Reduction Strategies

May 6, 2021

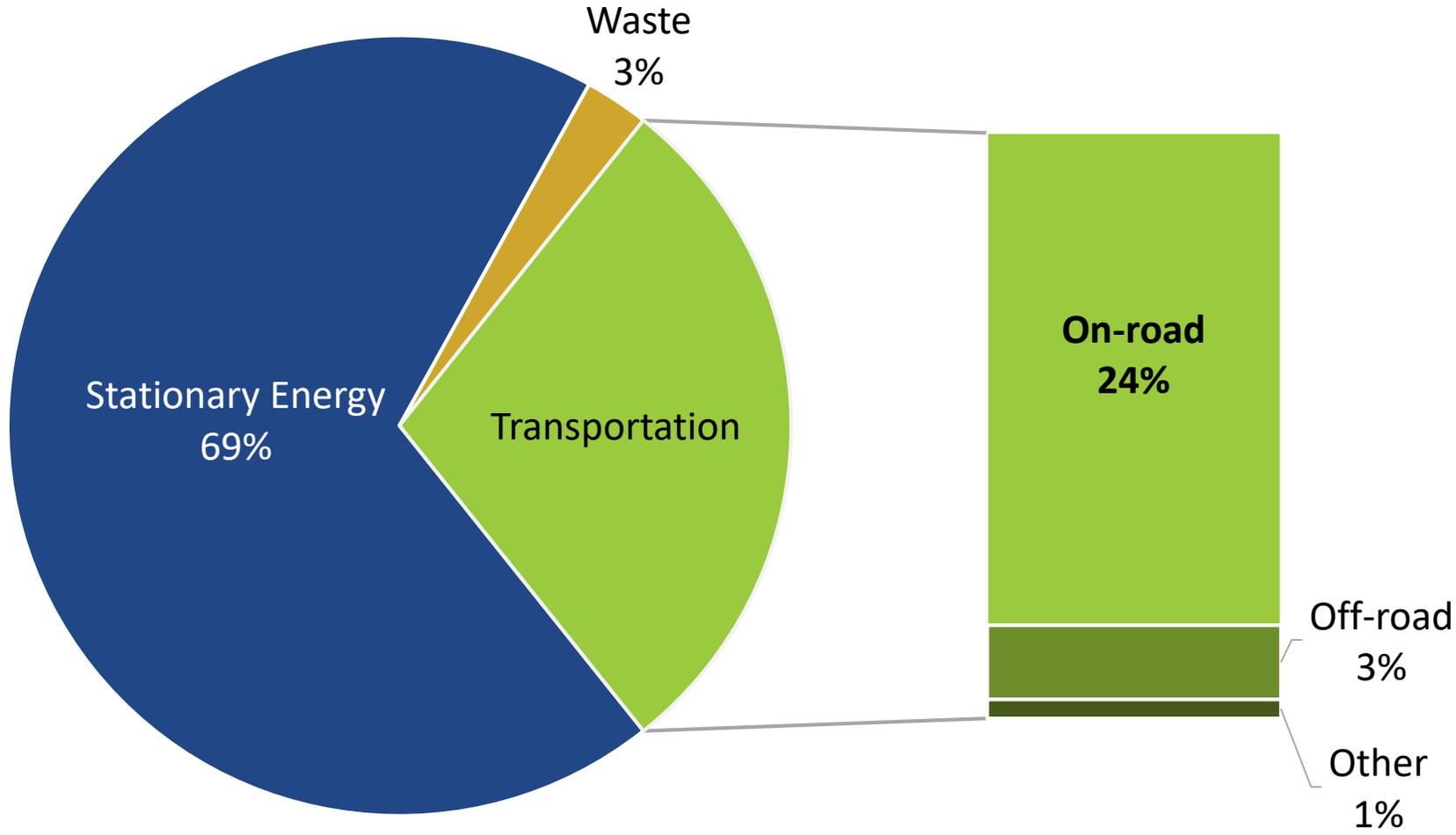


FY22 Climate Focus Area Work Plan

1. Regional climate planning and coordination
2. Transportation mitigation strategies
3. Local climate action and capacity building
4. Climate data and information
5. GHG reporting and performance monitoring
6. Electric vehicle infrastructure strategy
7. Regional greenhouse gas inventory
8. Regional transportation vulnerability assessment

On-road emissions are nearly one-quarter of all emissions

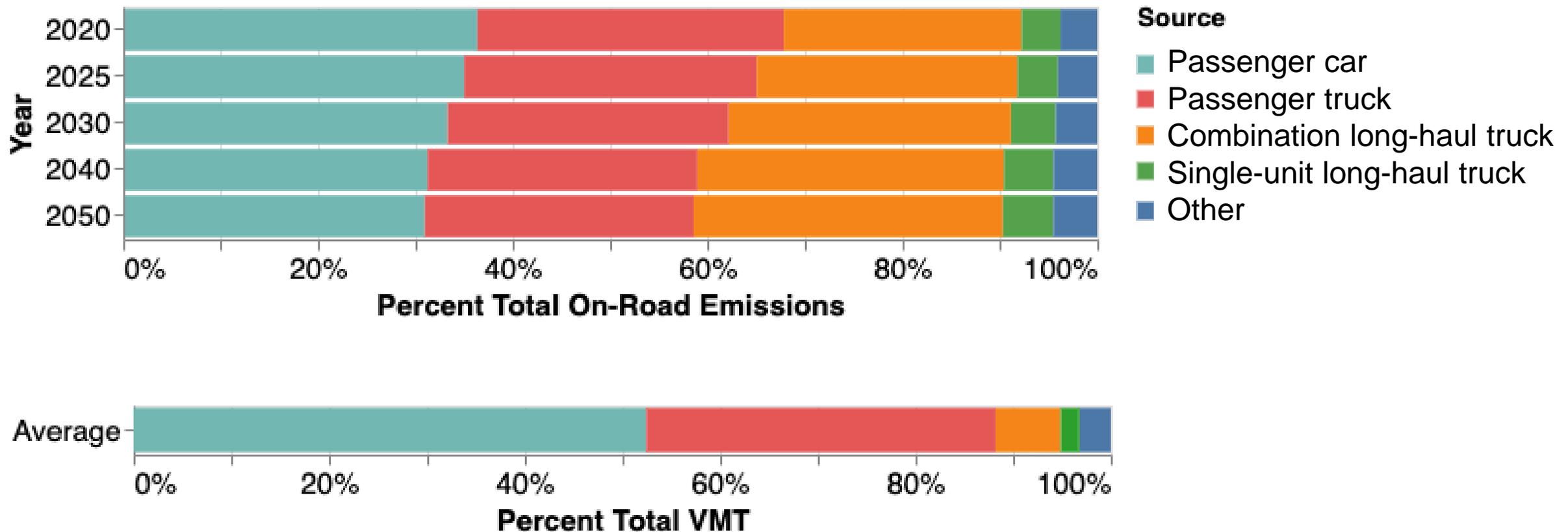
2015 Greenhouse Gas Inventory. Total Emissions = 119.13 MMTCO₂e.



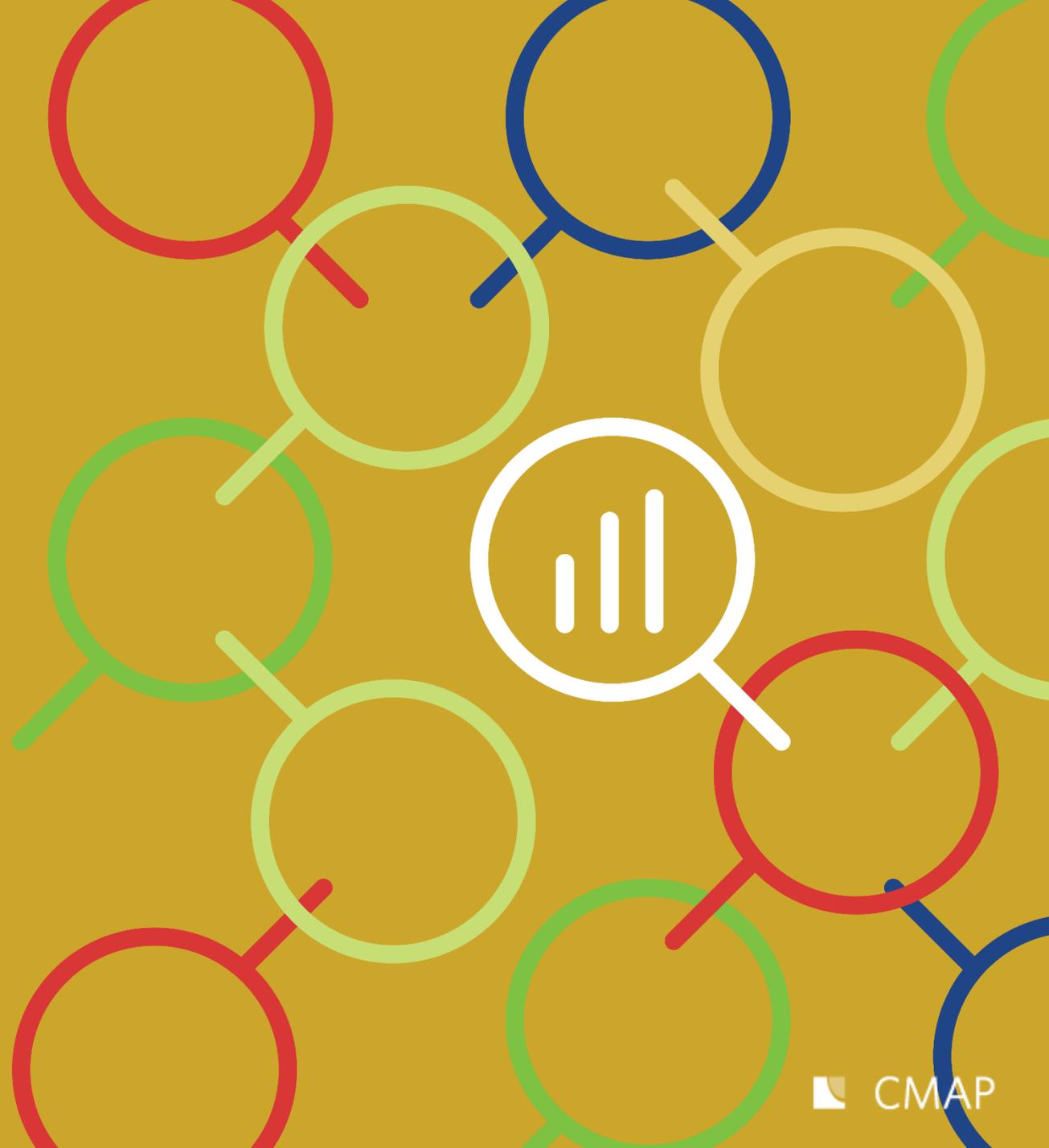
Majority of emissions from Passenger Cars, Passenger Trucks, and Combination Long-haul Trucks

Percent Total Emissions by Year by Source Type for Spring 2020 Conformity Run

Majority of VMT is from Passenger Cars and Trucks (bottom)



Transportation Mitigation – strategies to reduce GHG



Scenarios

Travel Behavior

- Transit RSPs
- Highway RSPs
- Increase transit use
- Driving cost
 - Price parking
 - Tolling/ congestion pricing
 - VMT or GHG tax
- Congestion reduction technologies
- Increase work from home

Vehicle Technology

- Electrify cars
- Electrify freight
- Electrify transit
- More efficient vehicles (CAFE standards)
- Other alternative fuels

Future Analysis / Out of Scope

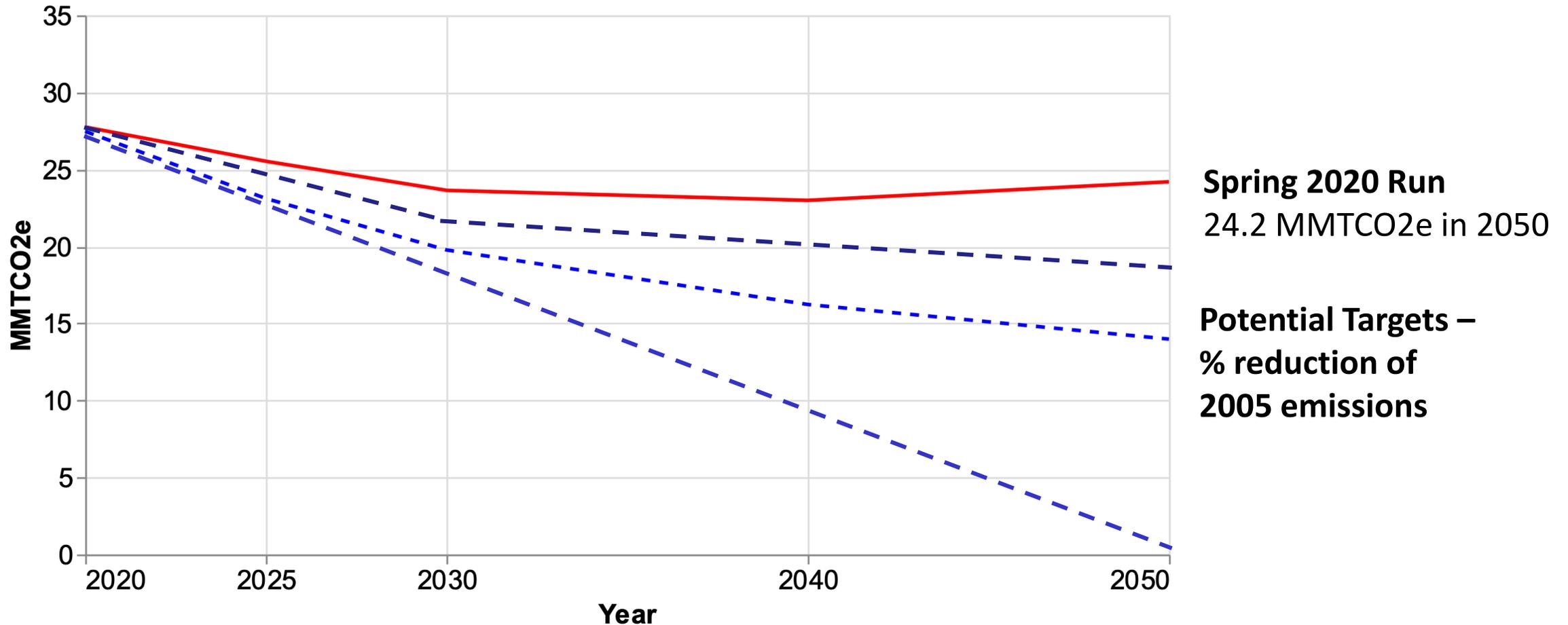
- Land use
- Air / Marine
- Electricity source
- Manufacturing / materials

Draft Scenario Results

Scenario	VMT	GHG	PM 2.5	EDA PM 2.5	Transit Ridership	Truck GHG	Passenger GHG
Highway RSP	0%	0%	3%	2%	-2%	0%	1%
Transit RSP	-1%	0%	4%	3%	0%	0%	0%
Price Parking Low	-1%	-1%	-1%	-1%	1%	0%	-1%
Price Parking Medium	-2%	-1%	-2%	-1%	7%	0%	-2%
Price Parking High	-4%	-2%	-3%	-2%	15%	0%	-4%
Work From Home 20%	-5%	-4%	-5%	-5%	-10%	0%	-6%
Work From Home 50%	-15%	-10%	-13%	-13%	-25%	0%	-17%
2050 Carbon Tax \$75	-2%	-1%	-2%	-1%	4%	0%	-2%
Off Peak Truck Delivery 25%	0%	0%	-1%	0%	0%	-1%	0%
Off Peak Truck Delivery 75%	2%	0%	4%	3%	-1%	-2%	1%
Short trip mode shift 50%	-6%	-4%	-5%	-6%	-1%	0%	-7%

Where are we trying to go?

Emissions by Year for Spring 2020 Conformity Run and Draft Reduction Target



Spring 2020 Run
24.2 MMTCO₂e in 2050

**Potential Targets –
% reduction of
2005 emissions**

Next Steps

Continue to model travel behavior scenarios

Examine the impact of alternative fuels such as electric, LNG, and hydrogen

Set targets for transportation GHG

Develop policy recommendations to achieve targets

Discussion

1. What are others, your organizations, doing to reduce emissions and address the climate crisis?
2. Is there a need for a regional conversation and or coordination around Transportation Mitigation action?



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